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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/228,658 01/12/99 PRINZING

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IM62/0824

EXAMINER

WALLS, D

ART UNIT

PAPER NUMBER

1731

DATE MAILED:

08/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/228,658

Applicant(s)

Prinzing et al.

Examiner

Dionne A. Walls

Group Art Unit

1731



☒ Responsive to communication(s) filed on Jun 8, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-34 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-34 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-24 and 26-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752,495.

Bentele et al claims a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the

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claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element").

While Bentele et al may not claim a common pressure fluid line arranged to generate internal pressures by the first and second support elements; an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; first and second support elements being pressure fluid-actuated, said elements being connected to a common pressure fluid line; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their pressure areas than the support elements of the

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shoe press (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. Various control devices (corresponding to the claimed "pressure reduction device/ variably adjustable valve/control device") can be provided such that different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45)

Lastly, regarding claims 4-12, and 18-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that "apparatus claims cover what a device *is*, not what a device *does*". (See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

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3. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 13 recites the limitation "the *common* pressure fluid line" (emphasis added) in lines 2 and 3 of this claim. There is insufficient antecedent basis for this limitation in the claim.

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***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-24 and 26-34 are rejected under 35 U.S.C. 103(a) as being obvious over Bentele et al (US. Pat. No. 5,788,817) in view of EP 752,495.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e).

This rejection under 35 U.S.C. 103(a) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application of any unclaimed subject matter prior to the effective U.S. filing date of the reference under 37 CFR 1.131.

Bentele et al discloses a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around

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which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element") (col. 3, line 34 - col. 5, line 54; see abstract and figs).

While Bentele et al may not disclose an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their



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pressure areas than the support elements of the shoe press (corresponding to the claimed “pressure-active surfaces...being not-equal”). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed “fluid actuated”) from a common pressure agent source. Various control devices (corresponding to the claimed “pressure reduction device/ variably adjustable valve/control device”) can be provided such that different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45)

Lastly, regarding claims 4-12, and 18-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that “apparatus claims cover what a device *is*, not what a device *does*”. (See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

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9. Claim 25 is rejected under 35 U.S.C. 103(a) as being obvious over Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

10. Claims 1-24 and 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 195 20 443 in view of EP 752,495.

DE 195 20 443 discloses a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its

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ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element") (cols. 1,2 and 3; see fig. 1).

While Bentele et al may not disclose an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their pressure areas than the support elements of the shoe press (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. Various control devices (corresponding to the claimed "pressure reduction device/ variably adjustable valve/control device") can be provided such that

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different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45)

Lastly, regarding claims 4-12, and 18-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that "apparatus claims cover what a device *is*, not what a device *does*". (See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being obvious over Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered.

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However, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or “crowning” of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

*Response to Arguments*

12. Applicant's arguments filed on June 8th, 2000 have been fully considered but they are not persuasive.

Applicant asserts that there is no proper combination of the Bentele et al/DE 195 20 443 and EP 752,495 references because the latter fails to teach or suggest that which is claimed, particularly as it relates to the pressure adjustment devices. The examiner, however, disagrees. First, contrary to what Applicant has stated, the Examiner finds no language in the EP 752,495 reference which states that the “pressure of the support elements should be approximately alike”. In fact, there are several statements to the contrary. The disclosure states that the support elements can be acted on, individually or in groups, with different pressures applied by a pressure agent (col. 1). Also stated is that the pressure supplied to each support element is selected according to the requirements for dewatering a particular web (col. 5) This language suggests, if not discloses, means to affect a pressure differential between pressures generated by the support elements in both the shoe press roll and the sag adjustment roll. This ability to change the pressure of the support elements has advantages depending on the type of dewatering is required for the

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web and allows for varying of the distribution of the pressing force as desired over the width of the web (see col. 1). Therefore, one of ordinary skill in the art would have been motivated by this teaching in EP 752,495 to modify the press roll device of Bentele et al/DE 195 20 443 in order to appreciate these benefits. Therefore, the combination of the Bentele et al/DE 195 20 443 and EP 752,495 references is proper.

### *Conclusion*

13. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

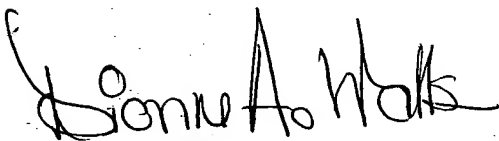
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dionne A. Walls whose telephone number is (703) 305 - 0933.

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The examiner can normally be reached Monday-Thursday from 6:30AM - 4:00PM (EST). The examiner can also be reached on alternate Fridays.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached at (703) 308-3837. Additionally, the fax number for this Group is (703) 305-7718.



Dionne A. Walls

August 22, 2000



Stanley S. Silverman  
Supervisory Patent Examiner  
Technology Center 1700